Shearing Stresses Arising During Plastic Flexure

the problems to which his article is devoted are treated in greater detail throughout the technical literature.

N. I. Bezukhov

Card 2/2

DAVYDOV, VLADIMIR IVANOVICH

PHASE I BOOK EXPLOITATION

Davydov, Vladimir Ivanovich

Izdeliya iz tonkostennykh profiley (Products Made of Thin-walled Sections) Moscow, Mashgiz, 1957. 186 p. 1,550 copies printed.

Ed: Molyukov, G.A., Engineer.

Ed. of Publishing House: Manakin, N. V.; Tech. Eds.: Shmel'kina, S.I., and El'kind, V.D.; Managing Ed. for literature on heavy machine building (Mashgiz): Golovin, S. Ya., Engineer.

PURPOSE: This book is intended for technologists and design engineers engaged in the manufacture of thin-walled metal sections. It may also be useful to mechanical engineering students of higher educational institutions.

COVERAGE: The author discusses the principal methods of manufacturing thin-walled sections, and describes the design, construction and proper setup of widely used types of bending and forming presses. The stretch-wrap method of bending is analyzed in detail. Moshnin, Ye.G. did research work in the field of stretch-wrap bending. There are 29 references, of which 26 are Soviet and 3 English.

Card 1/8

Products Made of Thin-walled Sections (Cont.)

Card 3/8

Products Made of Thin-walled Sections (Cont.)

Card 5/8

Products Made of Thin-walled Sections (Cont.)

Card 7/8

SOV/137-58-10-21522

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 152 (USSR)

AUTHOR: Davydov, V. I.

TITLE: An Investigation of the Process of Bending in Combination With Elongation (Issledovaniye protsessa gibki s rastyazheniyem)

PERIODICAL: V sb.: Inzhenern. metody rascheta tekhnol. protsessov. obrabotki metallov davleniyem. Moscow-Leningrad, Mashgiz, 1957, pp 149-166

ABSTRACT: The author makes use of a simplified mathematical theory on plasticity to analyze stresses occurring during plastic bending and during bending combined with elongation, which produces tensile stresses, σ_{tens}, of a magnitude equivalent to the σ_s. Equations for maximal tensile stresses and bending moments of the load are derived in terms of a reduced modulus of elasticity, the value of which, as given by the author, differs somewhat from the formulae proposed by other authors. The magnitude of stresses that are present in the elongated external fibers and that are relieved upon unloading, is determined together with the angle of springback (AS) and the change in radius of

Card 1/2

An Investigation of the Process of Bending (cont.)

curvature. The formulae derived are illustrated on a specific example involving the bending of a rectangular beam. From an analysis of the results obtained the following conclusions were made: The tensile loads must produce stresses the magnitude of which is equivalent to σ_s ; the smallest AS occur during bending of a thin material into curves with large radii; the parameters of bending (the thickness of material and the radius of curvature during bending in conjunction with elongation) have a relatively small effect on the magnitude of the AS. The residual stresses and the AS were analyzed on a special beam which was subjected to bending in combination with elongation. It was established that the selection of the cross section of a beam should be such that, during bending, the entire section of the beam is within a zone of plastic elongation (the magnitude of the AS is not greatly affected by the parameters of bending). The following procedures were employed in making a comparison between the degree to which the AS depends on the parameters of bending of a rectilinear beam made of mild St-3 steel: a) Pure bending; b) bending in combination with elongation brought about by applying an additional tensile force or creating additional tensile deformations; c) bending and stretching by means of connecting the beam to an auxiliary bar. The AS was minimal in the latter case.

1. Beams--Test methods 2. Mathematical analysis

Card 2/2

V. O.

[redacted] DAVYDOV, V.I.

221

AUTHOR: Davydov, V.I., Candidate of Technical Sciences, Gor'kov Polytechnic Institute, imeni Zhdanova.

TITLE: Production of formed sections. (Proizvodstvo gnutykh profiley.)

PERIODICAL: "Metallurg" (Metallurgist), 1957, No. 2, pp. 15 - 18, (U.S.S.R.)

ABSTRACT: In this article, the scope of the production and application of cold-formed sections is discussed and some machines for this process are considered. As an example, the stages in the cold-forming of radiator tubes are illustrated. There are three figures.

25(1) PHASE I BOOK EXPLOITATION SOV/2049

Davydov, Vladimir Ivanovich, and Mikhail Petrovich Maksakov

Proizvodstvo gnutykh tonkostennykh profiley metodom profilirovaniya na rolikovykh stankakh (Manufacture of Bent Thin-walled Sections on Roll-forming Machines) 2d ed., rev. and enl. Moscow, Metallurgizdat, 1959. 232 p. 3,500 copies printed.

Ed.: N.V. Manakin; Ed. of Publishing House: A.G. Golyatkina; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This book is intended for designers and engineering personnel, and may also be useful to vuz and tekhnikum students.

COVERAGE: The authors describe the processes of cold forming thin shapes, constructions of equipment used, and they give examples of tool design. Methods of making double layer tubing are presented. An appendix gives the standard profiles used at the Gor'kovskiy avtozovod (Gor'kiy Automobile Factory) including tool schemes. The authors thank Yu.K. Sannikov, Ye. I. Pankov, and N.A. Lebedev, Engineers at the Gor'kiy Automobile Factory; K.U. Bogoyavlenskiy, Assistant Professor at the Leningrad Polytechnical Institute, and A. I. Yermakov for collaboration

Card 1/4

28 (5)

AUTHORS: Goldovskiy, M. L., Davydov, V. I. SOV/32-25-5-40/56

TITLE: Construction of a Thickness Gauge With an Induction Source (Konstruktsiya tolshchinomera s induktivnym datchikom)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 5, pp 621 - 622 (USSR)

ABSTRACT: A device was constructed which permits measurements of the thickness of non-metallic coatings on metals, metallic coatings on non-metals, the thickness of a flat wall of a part or tube, and of metallic coatings on metals with an accuracy of up to 2-3%. The mode of operation is based on the use of a frequency of a generator adapted to the conductivity of the metal under investigation. The device may also be used for determining faults and structural irregularities of magnetic and non-magnetic metals without previous magnetization. The scheme of the device MT-57 (Fig 1) shows that a high-frequency generator feeds a transmitter (Fig 2) through the triode 6N3P. The change of the induction resistance of the transmitter in measuring the thickness of the layer brings about a change of the current which is determined by means of a triode voltmeter.

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Construction of a Thickness Gauge With an Induction Source SOV/32-25-5-40/56

The thickness of the coating is read on the scale of the M-24 microammeter. There are 2 figures.

ASSOCIATION: Tsentral'naya nauchno-issledovatel'skaya laboratoriya Gosgortekhnadzora SSSR (Central Scientific Research Laboratory of the Gosgortekhnadzor USSR)

Card 2/2

S/123/61/000/004/011/027
A004/A104

AUTHOR: Davydov, V. I.

TITLE: Determining the direction of the instantaneous motion of various die points during operation on ellipsograph bending machines

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1961, 12, abstract 4V93. (V sb. "Raschet i konstruir. kuznechno-press. mashin [ENIKMASh, vol. 2]", Moscow, 1960, 74-81)

TEXT: The author presents the results of theoretical investigations of the kinematics of ellipsograph bending machines intended for the bending of thin-walled sections by the method of curved winding and closed contour winding. The design of the machine is described. Formulae are derived for the determination of the stresses acting on the working organs of the machine during bending. The author obtains the analytical function of the value of angle (β) between the normal to the clamping rod axis and the direction of instantaneous motion of that point of the die shape in which at a given moment the blank is bent, for any point of the face plate from parameters determining the face plate motion trajectory. The formula for the calculation of the maximum value of β is given. There are 5 figures and 3 references.

S. Kolesnikov

[Abstractor's note: Complete translation]

Card 1/1

CHELISHCHEV, B.A.; DAVYDOV, V.I.

Rotor lines. Kuz.-shtam. proizv. 3 no.6:43-45 Je '61.
(MIRA 14:6)
(Rotors)

DAVYDOV, V. I.

Doc Tech Sci - (diss) "Elements of the theory of processes of bending fine-walled profiles by the method of coiling." Moscow, 1961. 33 pp; with diagrams; (State Committee of the Council of Ministers USSR for Automatization and Machine-Building, Central Scientific Research Inst of Technology and Machine-Building "TsNIITMash". ONTI); 180 copies; price not given; list of author's works at end of text (10 entries); (KL, 10-61 sup, 212)

DAVYDOV, V. I.

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PHASE I BOOK EXPLOITATION SOV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovman, Engineer; M. P. Vavilov, Engineer; A. B. Vernik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences BSSR; A. Ye. Gurevich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Drozd, Engineer; N. F. Yermolayev, Engineer; Ye. A. Zhukovich-Stopha, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Kovynev, Engineer; A. M. Kogos, Engineer; A. A. Korolev, Professor; M. Ye. Kugayenko, Engineer; A. V. Laskin, Engineer; B. A. Levitanskiy, Engineer; V. M. Lugovskoy, Engineer; I. M. Meyerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pasternak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

Card 1/12

Rolling Industry; Handbook SOV/5985

Engineer; O. P. Solov'yev, Engineer; M. A. Sidorkevich, Engineer; Ye. M. Tret'yakov, Engineer; I. S. Trishevskiy, Candidate of Technical Sciences; G. N. Khenkin, Engineer; and A. I. Tselikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tselikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Rokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobushinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are

Card 2/12

AZARENKO, B.S., kand. tekhn. nauk; AFANAS'YEV, V.D., kand. tekhn. nauk; BROVMAN, M.Ya., inzh.; VAVILOV, M.P., inzh.; VERNIK, A.B., inzh.; GOLUBKOV, K.A.; GUBKIN, S.I., akademik [deceased]; GUREVICH, A.Ye., inzh.; DAVYDOV, V.I., kand. tekhn. nauk; DROZD, V.G., inzh.; YERMOLAYEV, N.F., inzh.; ZHUKEVICH-STOSHA, Ye.A., inzh.; KIRILIN, N.M., kand. tekhn. nauk; KOVYNEV, M.V., inzh.; KOGOS, A.M., inzh.; KOROLEV, A.A., prof.; KUGAYENKO, M.Ye., inzh.; LASKIN, A.V., inzh.; LEVITANSKIY, B.A., inzh.; LUGOVSKIY, V.M., inzh.; MEYEROVICH, I.M., kand. tekhn. nauk; OVCHAROV, M.S., inzh.; PASTERNAK, V.I., inzh.; PERLIN, I.L., doktor tekhn. nauk; POBEDIN, I.S., kand. tekhn. nauk; ROKOTYAN, Ye.S., doktor tekhn. nauk; SAF'YAN, M.M., kand. tekhn. nauk; SMIRNOV, V.V., kand. tekhn. nauk; SMIRNOV, V.S.; SOKOLOVSKIY, O.P., inzh.; SOLOV'YEV, O.P., inzh.; SIDORKEVICH, M.A., inzh.; TRET'YAKOV, Ye.M., inzh.; TRISHEVSKIY, I.S., kand. tekhn. nauk; KHENKIN, G.N., inzh.; TSELIKOV, A.I.; GOROBINCHENKO, V.M., red. izd-va; GOLUBCHIK, R.M., red. izd-va; RYMOV, V.A., red. izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Rolling; a handbook] Prokatnoe proizvodstvo; spravochnik. Pod red. E.S.Rokotiana. Moskva, Metallurgizdat. Vol.1. 1962. 743 p. (MIRA 15:4)

1. Akademiya nauk BSSR (for Gubkin). 2. Chlen-korrespondent Akademii nauk SSSR (for Smirnov, TSelikov).
(Rolling (Metalwor))—Handbooks, manuals, etc.)

S/118/63/000/003/001/003

AUTHOR: Davydov, V. I., Candidate of Technical Sciences

TITLE: Programmed control in forging production

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 3, 1963, 1-5

TEXT: Survey of some developed devices and systems for programmed control of different forging processes was given. The NIITRAKTOROSEL'KHOZMASH (Scientific Research Institute for Tractor and Agricultural Machine Building) utilized programmed control for layout of rolled shapes (control over length); the Khar'kovskiy institut avtomatiki (Khar'kov Institute of Automation), the ENIKMASH [Abstracter's note: Expansion not known], and the STANKIN [Abstracter's note: Expansion not known] (control over weight and volume) with the shapes precut to reduce waste to a minimum. Work is under way to develop programmed control over cutting plates by patterns by means of guillotine shears and to prescribed contours by vibration shears. Particularly interesting work is under way in automating control of steam forging hammers in the Dneprospetsstal' Plant (Zaporozh'ye). A vertical radial forging machine is operating successfully under programmed control in the NIITRAKTOROSEL'KHOZMASH. The ENIKMASH has developed and tested a steam forging hammer with programmed control over the hammer action in the Kharkovskiy traktornyy.zavod (Khar'kov Tractor Plant). Programmed

Card 1 of 2

Programmed control in ....

control is used in plate stamping to cut large numbers of different sized holes in the work. The ENIKMASH is working on designing a special press operating under programmed control (with punched cards) to cut apertures of various shapes in thin-walled tubing. Soviet industry has designed a ТГПС-2 (TGPS-2) pipe bending machine under programmed control for bending pipes in different planes and the ENIKMASH is working on a machine under programmed control for bending small diameter pipe in small radii of curvature (about 2 diameters) in different planes and with no straight sections between curves. One of the plants under the Mosgorsovnarkhoz (Moscow City Economic Council) has a 5-ton hydraulic press under programmed control (by punched cards). Pressure can be maintained with an accuracy of 1.5 to 2% for 15 seconds to 60 minutes. The ENIKMASH has developed and is testing a programmed device for controlling a steam forging hammer for hot briquetting of waste metal chips. Manipulators (mechanical hands) operating under programmed control are being designed now.

DAVYDOV, Vladimir Ivanovich; GUROVICH, N.A., kand. khim. nauk, retsenzent; MASLOV, V.N., kand. khim. nauk, red.

[Germanium] Germanii. Moskva, Metallurgiia, 1964. 135 p. (MIRA 17:11)

KASABUTSKIY, Adam Antonovich; DAVYDOV, Viktor Ivanovich;
ILYUSHIN, A.P., red.

[Commercial computing and machine accounting] Khoziaistvennye vychisleniia i mekhanizatsiia ucheta. Moskva, Ekonomika, 1964. 255 p. (MIRA 17:12)

DAVYDOV, V.I.

DAVYDOV, V.I.; DIYEV, N.P.

Sublimation of germanium monosulfide. Zhur.neorg.khim. 2 no.9:2003-2006 S '57. (MIRA 10:12)

1.Ural'skiy filial AN SSSR, Institut metallurgii AN SSSR.
(Germanium sulfides) (Sublimation (Physical sciences))

137-58-6-12118

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 133 (USSR)

AUTHOR: Diyev, N.P., Davydov, V.I.

TITLE: An Investigation of Equilibrium Pressures of a Solid Sulfide of Tetravalent Germanium (Issledovaniye ravnovesnykh davleniy nad tverdym sul'fidom chetyrekhvalentnogo germaniya)

PERIODICAL: Izv. vost. fil. AN SSSR, 1957, Nr 7, pp 60-66

ABSTRACT: Equilibrium pressures were determined by the Knudsen method. Germanium disulfide was prepared by means of a process whereby a mixture of H_2S and S vapors reacted with powdered Ge at a temperature of 850°C. It is established that the equilibrium pressures of solid GeS_2 vary from 10^{-3} to 3 mm Hg at temperatures between 440-730°. It is shown that the extent of dissociation represented by the reaction $2GeS_2 = 2GeS + S_2$ increases with temperature, becoming complete at 800°. The authors comment on the existence of several deviations from the rectilinear path of the curve. L.P.

Card 1/1

1. Germanium disulfides--Preparation 2. Germanium disulfides--Properties 3. Germanium powders--Chemical reactions 4. Hydrogen sulfides--Chemical reactions 5. Sulfur vapors--Chemical reactions

DAVYDOV, V.I.

DIYEV, N.P.; DAVYDOV, V.I.

Germanium in heavy coal tar products. Zhur. prikl. khim. 30 no.11: 1685-1687 N '57. (MIRA 11:2)

(Germanium) (Coal-tar products)

78-3-4-36/38

AUTHORS: Ivanova, S. V., Davydov, V. I.

TITLE: On Germanium Disulfide (O disul'fide germaniya)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 4, pp. 1060-1061 (USSR)

ABSTRACT: The synthesis of germanium disulfide by the action of a mixture of hydrogen sulfide and sulfur vapor on finely powdered germanium metal at a temperature of 850°C is described. The chemical analysis showed a composition of Ge = 53,05 % and S = 46, 65 %.
The germanium disulfide crystal has rhombic structure, and hardness of 2 - 2,5 and a specific weight of 2,7 g/cm^3. Germanium disulfide does neither dissolve in cold nor in boiling sulfuric acid, hydrochloric acid or nitric acid; it is, however, easily soluble in alkaline solutions, especially alkaline hydrogen peroxide. On heating in the air it turns dark and decomposes separating hydrogen sulfide.

X-ray structural analysis proves the rhombic structure of germanium disulfide. There are 2 figures and 6 references,

Card 1/2

On Germanium Disulfide 78-3-4-36/38

5 of which are Soviet.

ASSOCIATION: Institut metallurgii Ural'skogo filiala Akademii nauk SSSR
(Institute for Metallurgy of the Ural Branch, AS USSR)

SUBMITTED: October 1, 1957

Card 2/2

DAVYDOV, V.I.; DIYEV, N.P. [deceased]

Behavior of germanium during the roasting of sulfide concentrates. Trudy Inst. met. UFAN SSSR no.4:23-34 '58. (MIRA 12:10)
(Sulfides--Metallurgy) (Germanium)

5(3) GER/2-59-8-7/19

AUTHOR: Davydov, V. (Leuna)

TITLE: Hydrogenation in Homogeneous Phase. Part I. Hydrogenation Reactions Using Cobalt Carbonyl Hydrogen as Hydrogenation Agent

PERIODICAL: Chemische Technik, 1959, Nr 8, pp 431-440 (GDR)

ABSTRACT: Solid catalysts are sensitive to sulphur compounds. Cobalt carbonyl hydrogen $CoH(CO)_4$, an effective hydrogenation catalyst is soluble in nearly all organic solutions and allows therefore to carry out hydrogenations in homogeneous phase. J. Wender and M. Orchin have discovered this property of $CoH(CO)_4$ and they proved the hydrating effect of $CoH(CO)_4$ to aldehydes, ketons and alcohols /Ref 8/. In this paper test results of the hydrogenation in homogeneous phase are reported, carried out in the Leuna laboratory. Test conditions: 200 - 220°C, 400 - 500 at, ratio H_2 : CO = 2.5 - 3.0 : 1, autoclave. Hydrogenation of aldehydes of a different kind: the yield of alcohol amounts to 50%. The beginning of the hydrogenation depends both on the kind of the aldehyde and on the kind of solvent. In all experiments the corresponding formate is formed besides the alcohol. The hydrogenation of benzaldehyde was

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Hydrogenation in Homogeneous Phase. Part I. Hydrogenation Reactions Using Cobalt Carbonyl Hydrogen as Hydrogenation Agent

especially investigated under different test conditions. The results are given in Table 2 and Figure 2. The hydrogenation velocity in homogeneous phase is as high as with a technically solid catalyst. In Figure 3 the hydrogenation of benzaldehyde in different solvents is shown. The hydrogenation of the same aldehyde with solid catalysts was also investigated. Hydrogenation of alcohols runs off slowly. The investigated esters were not hydrogenated under the test conditions. Aromatic ketons were hydrogenated easily in homogeneous phase. The hydrogenation of unsaturated nitrogen-carbon- or nitrogen-oxygen-links does not run off uniformly. In the experimental part an exact description of the test conditions and of the results of each experiment is given. The composition of the reaction products depends to a certain degree on the test conditions like pressure, ratio H_2 : CO, concentrations, the kind of solvent etc. $CoH(CO)_4$ is an active

Card 2/3

GER/2-59-8-7/19

Hydrogenation in Homogeneous Phase. Part I. Hydrogenation Reactions Using Cobalt Carbonyl Hydrogen as Hydrogenation Agent

hydrogenation agent to aldehydes, aromatic ketons, arylalcohols, Schiff-bases and Nitrosamines. Professor Doctor F. Asinger participated in this study.
There are: 8 tables, 6 graphs and 29 references, 13 of which are German, 9 American, 5 Italian, 1 Hungarian and 1 Dutch.

PRESENTED: November 1, 1958 by the author.

SUBMITTED: February 1, 1959

Card 3/3

SOV/80-32-2-39/56

AUTHORS: Davydov, V.I., Diyev, N.P.

TITLE: Investigation of the Precipitation Conditions of Copper-Germanium Sulfide of the $CuS \cdot GeS_2$ Type by Means of Radioactive Germanium (Issledovaniye usloviy osazhdeniya medno-germaniyevogo sul'fida tipa $CuS \cdot GeS_2$ s ispol'zovaniyem radioaktivnogo germaniya)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2, pp 441-442 (USSR)

ABSTRACT: Several germanium ores are complex sulfides of germanium, copper, iron, etc. Ye.M. Nanobashvili developed a method for obtaining a sulfide of the $CuS \cdot GeS_2$ type in an acid medium. The precipitation conditions of this sulfide were investigated by means of radioactive Ge-71. The sulfide was dissolved in a 1:3 HCl solution. Na_2S was used as a precipitator. Nearly complete precipitation was obtained, if the precipitator was present in a 2 - 3-fold excess compared to HCl.
There are 2 graphs and 6 references, 3 of which are Soviet and 3 English.

SUBMITTED: July 22, 1957

Card 1/1

DAVYDOV, V.I.; TEPLYAKOV, B.V.; ROMANOV, G.K.

Preparation of high-purity tellurium. TSvet. met. 34 no.11: 52-54 N '61. (MIRA 14:11)

(Tellurium—Metallurgy)

DAVYDOV, V.I.; BELIKOV, A.M.; IGNAT'YEVA, N.I.; VERBOVETSKAYA, D.Ye.

Reaction of germanium dioxide with iron. Zhur.prikl.khim. 35 no.11: 2543-2546 N '62. (MIRA 15:12)
(Germanium oxide) (Iron)

44897

S/076/63/037/001/020/029
B101/B186

5,4220

AUTHORS: Davydov, V. I., D'yachko, V. G.

TITLE: The formation of certain volatile germanium compounds at high temperatures

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 193 - 196

TEXT: The volatilization of germanium due to the formation of GeO and of sulfides and chlorides is investigated. GeO_2 was heated with C, FeS, or $CaCl_2$ in a dry air current at 1030 - 1070°C and the amount of sublimed Ge was determined gravimetrically. Metallic germanium was heated with FeS or $CaCl_2$ at 940 - 1000°C and the sublimation was determined likewise. Results: (1) In the presence of C the rates of formation for GeO, GeS, GeS_2 and $GeCl_4$ from GeO_2 are almost equal: ~45 - 55% sublimation in 30 min at 1030°C, ~65 - 75% at 1070°C in 30 min. (2) In an oxidizing atmosphere the formation rate of sulfides and $GeCl_4$ is much smaller than in the presence of a reducing agent. (3) In metallic Ge ~45% sublimed as $GeCl_4$, ~70% as GeO, 85 - 90%

Card 1/2

The formation of certain...

as GeS_2 within 30 min at temperatures varying from 930 to 1000°C. These results are consistent with the probabilities for the reactions calculated by the thermodynamic equation for the free enthalpy: $\Delta Z_T = \Delta H_{298} - T \cdot \Delta S_{298}$.

There are 4 figures and 2 tables.

ASSOCIATION: Chelyabinskiy sovnarkhoz Nauchno-issledovatel'skiy institut metallurgii (Chelyabinsk sovnarkhoz Scientific Research Institute of Metallurgy)

SUBMITTED: October 31, 1961

Card 2/2

Davy Dau, V.I.

Akademiya nauk SSSR. Ural'skiy filial. Institut metallurgii

Trudy, Vyp. 4 (Transactions of the Institute of Metallurgy, Ural Branch, Academy of Sciences, USSR; No. 4) Sverdlovsk, 1958. 157 p. Errata slip inserted. 1,000 copies printed.

Editorial Board: N.A. Vatolin (Resp. Ed.), Candidate of Technical Sciences; A.S. Mikulinskiy, Professor, Doctor; V.Ya. Miller, Professor; P.A. Pazdnikov, Candidate of Technical Sciences; and S.S. Lisnyak, Candidate of Technical Sciences; Ed.: M.S. Baranovskaya.

PURPOSE: This book is intended for ferrous and nonferrous metallurgists.

COVERAGE: The book presents results of investigations of theoretical problems in metallurgy and chemistry and gives information on the efficient use of raw materials in ferrous and nonferrous metallurgy and on the development of new production processes in the metallurgical and chemical industries. The articles were written by junior members and experienced specialists of the scientific staff of the Institutes of Metallurgy, Chemistry, and Electrochemistry, Ural Branch, Academy of Sciences, USSR.

DAVYDOV, V. I., Cand of Tech Sci -- (diss) "The Action of Germanium During Scorching by Sulfide Concentrates," Moscow, 1959, 22 pp (Institute of Metallurgy im A. A. Baykov) (KL, 1-60, 122)

DAVYDOV, V.I.; TEPLYAKOV, B.V; ROMANOV, G.K.

Reduction of germanium dioxide by carbon and carbon monoxide.
Zhur.prikl.khim. 35 no.7:1625-1629 Jl '62. (MIRA 15:8)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.
(Germanium oxide) (Carbon) (Carbon monoxide)

DAVYDOV, V.I., dotsent

Intrauterine determination of fetal weight by Stroikov's method. Kaz. med. zhur. no.5:58-59 S-O '61. (MIRA 15:3)

1. Kafedra akusherstva i ginekologii lechebnogo fakul'teta (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent V.I. Davydov) Sverdlovskogo meditsinskogo instituta.
(RETUS)

DAVYDOV, V.I., dotsent; VORONIN, V.S.

Pregnancy and labor in dwarfs. Kaz.med.zhur. no.4:46-47 Jl-Ag '62.
(MIRA 15:8)

1. Kafedra akusherstva i ginekologii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent V.I.Davydov) Sverdlovskogo meditsinskogo instituta.
(PREGNANCY, COMPLICATIONS OF) (LABOR, COMPLICATED) (DWARFS)

DAVYDOV, V.I.; VERSHININA, V.V.

Determination of the weight of the fetus before labor by Z.P. Iakubova's method. Kaz. med. zhur. no.1:38-40 Ja-F '63. (MIRA 16:8)

1. Kafedra akusherstva i ginekologii lechebnogo fakul'teta (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent V.I. Davydov) Sverdlovskogo meditsinskogo instituta.
(OBSTETRICS)

DAVYDOV, V.I., dotsent; VORONIN, V.S.

Stillbirth and early mortality of infants by coiling of the umbilical cord. Kaz. med. zhur. no.5:62-63 S-O'63 (MIRA 16:12)

1. Sverdlovskiy rodil'nyy dom Ural'skogo zavoda tyazhelogo mashinostroyeniya (glavnyy vrach - M.S. Balaganova, nauchnyy rukovoditel' - dotsent V.I. Davydov).

VOLKOLAKOV, F.K.; DAVYDOV, V.I.; KIBANOV, G.A.; YAZHIN, [illegible].

New occurrences of Cambrian fauna and flora in the Bambuyka basin (western Transbaikalia). Geol. i geofiz. no.8:133-135 '64. (MIRA 18:2)

1. Buryatskoye geologicheskoye upravleniye, Ulan-Ude.

DAVYDOV, V.I.; MISHEN'KIN, B.P.

Modifying the amplifier of SS-24p seismic stations for deep seismic sounding and the refraction correlation method. Geol. i geofiz. no.2:130-133 '64. (MIRA 18:4)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

DAVYDOV, V.L., tekhnik

Cooling the bearings of an exhaust fan. Energetik 8 no.1:12 Ja '60. (MIRA 13:5)
(Exhaust systems--Cooling)

DAVYDOV, V.L., tekhnik

Cooling of exhaust pump bearings. Energetik 8 no.7:16 Jl '60. (MIRA 13:8)
(Bearings(Machinery)--Cooling)
(Pumping machinery)

ACC NR: AT7005805 (A,N) SOURCE CODE: UR/0000/66/000/000/0067/0077

AUTHORS: Shikhov, S. B.; Davydov, V. I.; Shishkov, L. K.

ORG: none

TITLE: An efficient analytic method for designing multi-region reactors

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Inzhenerno-fizicheskiye voprosy yadernykh reaktorov (Problems of nuclear reactor engineering and physics); sbornik statey. Moscow, Atomizdat, 1966, 67-77

TOPIC TAGS: NUCLEAR REACTOR DESIGN, nuclear reactor, approximation method, boundary value problem, reactor neutron flux, plane geometry, Legendre polynomial, mathematic matrix

ABSTRACT: The following critical system of equations of a multi-region reactor in an m-group diffusion approximation is examined:

$$D_i^k \Delta \Phi_i^k - (\Sigma_a^k + \Sigma_d^k)_i \Phi_i^k + \sum_{j=1}^{k-1} \Sigma_i'^k \Phi_i' + \frac{1}{k_{eff}} x_i^k \sum_{j=1}^{m} (\nu_j \Sigma_j)_i' \Phi_i' = 0$$

under the boundary conditions

$$\Phi_i^k(R_i) = \Phi_{i+1}^k(R_i);$$

$$D_i^k \nabla \Phi_i^k(R_i) = D_{i+1}^k \nabla \Phi_{i+1}^k(R_i);$$

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ACC NR: AT7005805

$$\nabla\Phi_i^k(0) = 0;$$

$$\gamma^k \nabla\Phi_n^k(R_n) = \Phi_n^k(R_n),$$

where Φ_i^k is the neutron flux of the k-th energy group in the i-th region (k = 1, 2, 3, ..., m; i = 1, 2, 3, ..., n); and R_i is the external boundary of the i-th region. The problem of the distribution of monoenergetic neutrons in a plane-parallel medium is considered. The solution of the vector-matrix version of the initial equation or

$$\Delta\varphi_i + \hat{K}_i\varphi_i = 0$$

is given as:

$$\Phi_i(r) = \cos(\sqrt{\hat{K}_i}\,r)\,A_i + \sin(\sqrt{\hat{K}_i}\,r)\,B_i;$$

$$J_i(r) = -\hat{D}_i\sqrt{\hat{K}_i}\sin(\sqrt{\hat{K}_i}\,r)\,A_i + \hat{D}_i\sqrt{\hat{K}_i}\cos(\sqrt{\hat{K}_i}\,r)\,B_i,$$

where $J_i(r) = \hat{D}_i\nabla\Phi_i(r)$; and A_i and B_i are unknown vectors of dimensionality m. The solution is also given for the case of cylindrical geometry. To construct the critical condition and to determine the neutron fluxes by this method, it is necessary to know only the elements of one of the columns of the matrix L. The order of the matrices is independent of the number of regions. The time-consuming problem of the eigenvalues is eliminated, and the algorithm is easily programmed. Orig. art. has: 41 formulas.

SUB CODE: 18/ SUBM DATE: none/ ORIG REF: 004

Card 2/2

ACC NR: AT7007353 (A) SOURCE CODE: UR/0000/66/000/000/0126/0131

AUTHOR: Davydov, V. I.

ORG: None

TITLE: The problem of stepping up the intensity and complexity of automation in forging and stamping production

SOURCE: Soveshchaniye po avtomatizatsii protsessov mashinostroyeniya. 4th, 1964. Avtomatizatsiya protsessov svarki i obrabotki davleniyem (Automation of welding and pressure treatment processes); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1966, 126-131

TOPIC TAGS: industrial automation, metal stamping, metal forging

ABSTRACT: Plans for automation of production in the Soviet Union involve the introduction of at least 60,000 automatic production lines including 12,000 in forging and pressing shops by 1980. Industrial mechanization and automation of forging and stamping production faces the following impediments: 1. insufficient specialization and concentration of individual forms of forging and stamping production; 2. an insufficient number of technological processes developed with regard to possibilities for automation; 3. insufficient automation of general-purpose forging and pressing machines; 4. a limited number of standard designs and lack of a centralized outlet for means of

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ACC NR: AT7007353

automation; 5. the absence of standard solutions for complex automation of the production of individual types of metal articles by pressure treatment; 6. unreliable operation of electrical, pneumatic and hydraulic equipment in automatic systems of forging and stamping production; 7. low strength of punches and dies; 8. an ineffective system for introduction of new techniques in machine building enterprises. The consequences of each of these problems are discussed individually and solutions are suggested. Programmed control is recommended for dinking presses, shears, hammers, radial forging machines, punch presses and bar bending machines. The problems involved in adaptation of programmed control systems from metal-cutting machine tools to forging and stamping production are discussed.

SUB CODE: 13/ SUBM DATE: None/ ORIG REF: 003

Card 2/2

DAVYDOV, V.M.

Grinding guides of faceplates of the heavy 5330 type gear-cutting machine. Mashinostroitel' no.1:35-36 Ja '57. (MLRA 10:4)
(Gear-cutting machines)

DAVYDOV, V.M., inzhener.

Shaving pinions on lathes. Mashinostroitel' no.8:33 Ag '57.
(Lathes--Attachments) (Gear cutting) (MLRA 10:8)

DAVYDOV, V.M.

Reversing mechanisms used for cutting herringbone gears on heavy gear-milling machines. Stan. i instr. 30 no.2:18-20 F '59.
(MIRA 12:3)

(Gear cutting)

GLADKIY, K.V.; DAVYDOV, V.M.; KOZYREV, V.S.

Apparatus for automatic adjustment of control networks. Trudy MINKHiGP no.31:188-196 '60. (MIRA 13:11)
(Surveying)
(Prospecting--Geophysical methods--Equipment and supplies)
(Electronic analog computers)

DAVYDOV, V.M.

Transient processes in an apparatus for setting up a field.
Prikl. geofiz. no.40:77-85 '64 (MIRA 18:1)

ALEKSEYEV, G.P.; DAVYDOV, V.M.; TSLAV, L.Z.

Electric well logging as a method for locating the pay contour of oil and gas-bearing structures. Neftegaz. geol. i geof. no.5:47-48 '65. (MIRA 18:7)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti i Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika Gubkina.

VAN'YAN, L.L.; DAVYDOV, V.M.

Distortion of the late stage of establishment of a magnetic field by a nonconducting inclusion. Izv. AN SSSR. Fiz. zem. no.6:23-30 '65. (MIRA 18:7)

1. Institut neftekhimicheskoy i gazovoy promyshlennosti imeni Gubkina.

L 7792-66

ACC NR: AP5027633 SOURCE CODE: UR/0109/65/010/011/2081/2084

AUTHOR: Berlin, A. S.; Davydov, V. M.

ORG: none

TITLE: Method for measuring the Q-factor of nonlinear-capacitance diodes at shf which does not require reference standards or tuning of the measuring chamber

SOURCE: Radiotekhnika i elektronika, v. 10, no. 11, 1965, 2081-2084

TOPIC TAGS: semiconductor diode, shf measurement

ABSTRACT: Regarding a negative-bias diode as a passive linear quadripole, a new formula is developed which permits determining the Q-factor of the diode active region on the basis of measured voltage standing-wave ratio and phase shift at two bias voltages in any measuring chamber, without resistance reference standards. The spread of diode-case parameters does not affect the accuracy of measurements. An experimental verification of the formula is claimed. The method is recommended for 10—100-Gc band and for the cases when retuning of the diode chamber is undesirable. Orig. art. has: 3 figures and 21 formulas.

SUB CODE: 09 / SUBM DATE: 01Feb65 / ORIG REF: 002 / OTH REF: 001

nw

Card 1/1

UDC: 621.317.337:621.382.2

ALEKSEYEV, G.P.; DAVYDOV, V.M.

Studying the Kama-Kinel' Depression and Bavly sediments of the northwestern part of Kuybyshev Province by establishing an electromagnetic field. Geol. nefti i gaza 8 no.11:60-62 N '64.
(MIRA 17:12)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.

S/080/62/035/005/015/015
D247/D307

AUTHORS: Freydlin, G. N. and Davydov, V. N.

TITLE: Separation of phthalic acid by esterification without a catalyst

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 5, 1962, 1150-1153

TEXT: The authors aimed at developing a method of separating isophthalic (I) and terephthalic (II) acids, based on selective esterification with MeOH under pressure, to obtain II from a mixture of m- and p-xylenes rather than from the expensive pure p-xylene. The relative rates of esterification varied with temperature, MeOH:acid ratio (n) and time. Thus the rate of esterification of I, at 170 - 180°C and 100 - 200 atm, is 7 - 10 times greater than that of II; raising (n) increased the rate of reaction of II at 180°C (over 1 hr) but not of I. Presence of water retarded both processes to the same extent. The optimum time was 40 - 80 min. The content of II could be raised from 25 - 60% to 87 - 96% by esterification

Card 1/2

KOSSOV, F.F., inzh.; DAVYDOV, V.N., inzh.

From practices of the a.c. electrification of railroads. Zhel. dor.transp. 44 no.6:41-46 Je '62. (MIRA 15:8)

1. Nachal'nik Gosudarstvennogo proyektno-izyskatel'skogo instituta po proyektirovaniyu elektrifikatsii dorog i energeticheskikh ustanovok (for Kossov). 2. Glavnyy spetsialist Gosudarstvennogo proyektno-izyskatel'skogo instituta po proyektirovaniyu elektrifikatsii dorog i energeticheskikh ustanovok (for Davydov).
(Railroads--Electrification)

FREYDLIN, G.N.; DAVYDOV, V.N.

Separation of terephthalic and isophthalic acids by extraction with hot methanol. Zhur.prikl.khim. 35 no.11:2520-2526 N '62. (MIRA 15:12)
(Terephyhalic acid) (Isophthalic acid) (Methanol)

DAVYDOV, V.N.

BENESHEVICH, I.I., kandidat tekhnicheskikh nauk; BOGIN, N.H., kandidat tekhnicheskikh nauk; BYKOV, Ye.I., inzhener; VLASOV, I.I., kandidat tekhnicheskikh nauk; GRITSEVSKIY, M.Ye., inzhener; GRUBER, L.O., inzhener; GURVICH, V.G., inzhener; DAVYDOV, V.N., inzhener; YERSHOV, I.M., kandidat tekhnicheskikh nauk; ZASORIN, S.N., kandidat tekhnicheskikh nauk; IVANOV, I.I., kandidat tekhnicheskikh nauk; KRAUKLIS, A.A., inzhener; KROTOV, L.B., inzhener; LAPIN, V.B., inzhener; LASTOVSKIY, V.P., dotsent; LATUNIN, N.I., inzhener; MARKVARDT, K.G., professor, doktor tekhnicheskikh nauk; MAKHAYLOV, M.I., professor, doktor tekhnicheskikh nauk; NIKANOROV, V.A., inzhener; OSKOLKOV, K.N., inzhener; OKHOSHIN, L.I., inzhener; PARFENOV, K.A., dotsent, kandidat tekhnicheskikh nauk; PERTSOVSKIY, L.M., inzhener; POPOV, I.P., inzhener; PORSHNEV, B.G., inzhener; RATNER, M.P., inzhener; ROSSIYSKIY, G.I., dotsent, kandidat tekhnicheskikh nauk; RYKOV, I.I., kandidat tekhnicheskikh nauk; RYSHKOVSKIY, I.Ya., dotsent, kandidat tekhnicheskikh nauk; RYABKOV, A.Ya., professor [deceased]; TAGER, S.A., kandidat tekhnicheskikh nauk; KHAZEN, M.M., professor, doktor tekhnicheskikh nauk; CHERNYSHEV, M.A., doktor tekhnicheskikh nauk; EDIN, L.Ye., professor, doktor tekhnicheskikh nauk; YURGENEV, B.N., dotsent; AKSENOV, I.Ya., dotsent, kandidat tekhnicheskikh nauk; ARKHANGEL'SKIY, A.S., inzhener; BARTENEV, P.V., professor, doktor tekhnicheskikh nauk; BERNGARD, K.A., kandidat tekhnicheskikh nauk; BUROVOY, N.Ye., dotsent, kandidat tekhnicheskikh nauk; BOGDANOV, I.A., inzhener; BOGDANOV, N.K., kandidat tekhnicheskikh nauk; VINNICHENKO, N.G., dotsent, kandidat ekonomicheskikh nauk;

(Continued on next card)

MENESHEVICH, I.I.----(continued) Card 2.
VASIL'YEV, V.F.; GONCHAROV, N.G., inzhener; DERIBAS, A.T., inzhener; DOBROSEL'SKIY, K.M., dotsent, kandidat tekhnicheskikh nauk; DLUGACH, B.A., kandidat tekhnicheskikh nauk; YEFIMOV, G.P., kandidat tekhnicheskikh nauk; ZEMBLINOV, S.V., professor, doktor tekhnicheskikh nauk; ZABELLO, K.L., kandidat tekhnicheskikh nauk; IL'IN, K.P., kandidat tekhnicheskikh nauk; KARETNIKOV, A.D., kandidat tekhnicheskikh nauk; KAPLUN, F.Sh., inzhener; KANSHIN, M.D.; KOCHNEV, P.P., professor, doktor tekhnicheskikh nauk; KOGAN, L.A., kandidat tekhnicheskikh nauk; KUCHURIN, S.F., inzhener; LEVASHOV, A.D., inzhener; MAKSIMOVICH, B.M., dotsent, kandidat tekhnicheskikh nauk; MARTYNOV, M.S., inzhener; MEDEL', O.M., inzhener; NIKITIN, V.D., professor, kandidat tekhnicheskikh nauk; PADNYA, V.A., inzhener; PANTELEYEV, P.I., kandidat tekhnicheskikh nauk; PETROV, A.P., professor, doktor tekhnicheskikh nauk; POVOROZHENKO, V.V., professor, doktor tekhnicheskikh nauk; PISKAREV, I.I., dotsent, kandidat tekhnicheskikh nauk; SERGEYEV, Ye.S., kandidat tekhnicheskikh nauk; SIMONOV, K.S., kandidat tekhnicheskikh nauk; SIMANOVSKIY, M.A., inzhener; SUYAZOV, I.G., inzhener; TAIDAYEV, F.Ya., inzhener; TIKHONOV, K.K., kandidat tekhnicheskikh nauk; USHAKOV, N.Ya., inzhenr; USPENSKIY, V.K., inzhener; FEL'DMAN, E.D., kandidat tekhnicheskikh nauk; FERAPONTOV, G.V., inzhener; KHOKHLOV, L.P., inzhenr; CHERNOMORDIK, G.I., professor, doktor tekhnicheskikh nauk; SHAMAYEV, M.F., inzhener; SHAPIRKIN, B.I., inzhener; YAKUSHIN, S.I., inzhener; GRANOVSKIY, P.G., redaktor; TISHCHENKO, A.I., redaktor; ISAYEV, I.P., dotsent, kandidat tekhnicheskikh nauk, redaktor; KLIMOV, V.F., dotsent kandidat tekhnicheskikh

(Continued on next card)

BENESHEVICH, I.I.-- (continued) Card 3.
nauk, redaktor; MARKOV, M.V., inzhener, redaktor; KALININ, V.K., inzhener, redaktor; STEPANOV, V.N., professor, redaktor; SIDOROV, N.I., inzhener, redaktor; GERONIMUS, B.Ye., kandidat tekhnicheskikh nauk, redaktor; ROBEL', R.I., otvetstvennyy redaktor

[Technical reference manual for railroad engineers] Tekhnicheskii spravochnik zheleznodorozhnika. Moskva, Gos. transp.zhel-dor. izd-vo. Vol.10. [Electric power supply for railroads] Energosnabzhenie zheleznykh dorog. Otv.red. toma K.G.Markvardt. 1956. 1080 p. Vol.13. [Operation of railroads] Ekspluatatsiia zheleznykh dorog. Otv. red. toma R.I.Robel'. 1956. 739 p. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Petrov)
(Electric railroads) (Railroads--Management)

DAVYDOV, V.N.

GERONIMUS, B.Ye., kandidat tekhnicheskikh nauk; DAVYDOV, V.N., inzhener.

Technical and economic comparison of electric traction systems.
Zhel.dor.transp.38 no.12:18-22 D '56. (MLRA 10:2)
(Electric railroads)

DAVYDOV, V.N., inzh.

Prospects and characteristics of railroad electrification in China. Zhel. dor. transp. 40 no.12:79-81 D '58. (MIRA 12:3)
(China--Railroads--Electrification)

DAVYDOV, V.N., inzh.; KOLESNIKOVA, N.N., inzh.

Improving the electric power supply systems of d.c.electric railroads. Zhel.dor.transp. 42 no.11:18-22 N '60. (MIRA 13:11)

1. Glavnyy spetsialist Transelektroproyekta (for Davydov). 2. Rukovoditel' brigady Transelektroproyekta (for Kolesnikova).
(Electric railroads--Substations)

DAVYDOV, V.N.

Efficient utilization of traction substation capacity. Transp. stroi. 11 no.10:21-24 O '61. (MIRA 14:10)

1. Glavnyy spetsialist Transelektroproyekta.
(Electric substations) (Electric railroads)

KOSOV, F.F.; KRASOVSKIY, Ye.S.; DAVYDOV, V.N.

Problems of railroad electrification on single-phase current. Transp.stroi. 12 no.7:10-13 Jl '62. (MIRA 16:2)

1. Nachal'nik Gosudarstvennogo proyektno-izyskatel'skogo instituta po proyektirovaniyu elektrifikatsii dorog i energeticheskikh ustanovok (for Kosov). 2. Nachal'nik tekhnicheskogo otdela Gosudarstvennogo proyektno-izyskatel'skogo instituta po proyektirovaniyu elektrifikatsii dorog i energeticheskikh ustanovok (for Krasovskiy). 3. Glavnyy spetsialist Gosudarstvennogo proyektnoizyskatel'skogo instituta po proyektirovaniyu elektrifikatsii dorog i energeticheskikh ustanovok (for Davydov). (Railroads—Electrification)

BESKOV, B.A.; GERONIMUS, B.Ye.; DAVYDOV, M.N.; KREST'YANOV, M.Ye.; MARKVARDT, G.G.; MININ, G.A.; Prinimal uchastiye TAMAZOV, A.I.; VAYNBLAT, E.G., inzh., retsenzent; KRUGLYAKOV, F.Ye., inzh., retsenzent; KUCHMA, K.G., kand. tekhn.nauk, retsenzent; LOMAZOV, D.V., kand. tekhn. nauk, retsenzent; SLUTSKIY, Z.M., inzh., retsenzent; FRADKIN, I.S., inzh., retsenzent; YUSHKOV, P.K., inzh., retsenzent; PERTSOVSKIY, L.M., inzh., red.; USENKO, L.A., tekhn. red.

[Design of electric railroad power supply systems] Proektirovanie sistem energosnabzheniia elektricheskikh zheleznykh dorog. [By] B.A.Beskov i dr. Moskva, Transzheldorizdat, 1963. 470 p. (MIRA 17:2)

DAVYDOV, V.N.

Make greater use of the possibilities for a complete electrification of railroads. Zhel. dor. transp. 47 no.1:36-38 Ja '65.
(MIRA 18:1)

1. Glavnyy spetsialist Gosudarstvennogo ordena Trudovogo Krasnogo Znameni proyektno-izyskatel'skogo instituta elektrifikatsii zheleznykh dorog i energeticheskikh ustanovok Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR.

DAVYDOV, V.N.

Efficiency of complex electrification. Zhel. dor. transp. 47 no.5:57-61 My '65. (MIRA 18:6)

1. Glavnyy spetsialist Gosudarstvennogo ordena Trudovogo Krasnogo Znameni proyektno-izyskatel'skogo instituta elektrifikatsii zheleznykh dorog i energeticheskikh ustanovok Gosudarstvennogo proizvodstvennogo komiteta po transportnomu stroitel'stvu SSSR.

DAVYDOV, V.N., inzh.

Combining traction and district substations during the electrification of railroads. Transp. stroi. 15 no.6:41-43 Je '65. (MIRA 18:12)

DAVYDOV, V.P., inzh.

Effect of snow blankets on the construction and function of roofs of heated buildings. Trudy MIIT no.122:215-222 '59. (MIRA 13:5)

(Roofs) (Snow)

DAVYDOV, V.P., insh.

Draining snow water from the roofs of heated buildings. Trudy MIIT no.122:223-227 '59. (MIRA 13:5)
(Gutters)

SEMENOV, L.V., starshiy nauchnyy sotrudnik; DAVYDOV, V.P., mladshiy nauchnyy sotrudnik

More about the order of planning and expenditure accounting in coal mines. Ugol' 35 no. 4:57-58 Ap '60. (MIRA 14:4)

1. Institut gornyuchikh iskopayemykh AN SSSR.
(Coal mines and mining--Accounting)

DAVYDOV, V. P., GALAYEV, YU. V., and GUBAREV, YE. M. (USSR)

"The Amino Acid Decarboxylases in Different Strains of Escherichia coli and their Pathogenicities."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 Aug 1961

DAVYDOV, V.P.

Astronomic observations in March. Priroda 51 no.2:127-128 F '62. (MIRA 15:2)

1. Gosudarstvennyy astronomicheskiy institut im. P.K.Shternberga, Moskva.
(Mars(Planet))

POPOV, V.M.; DAVYDOV, V.P.; SEMENOV, L.V.

Use of liquefied gases abroad. Trudy IGI 16:114-123 '61.
(MIRA 16:7)
(Liquefied petroleum gas)

DAVYDOV, V.P.; POPOV, V.M.; SEMENOV, L.V.

Prospects for the development of the industry of liquefied gases in the U.S.S.R. Trudy IGI 16:124-131 '61. (MIRA 16:7)
(Liquefied petroleum gas)

SEMENOV, L. V., kand. ekonom. nauk; DAVYDOV, V. P., kand. ekonom. nauk

Economics of using the new types of binding materials for briquetting coal fines. Ugol' 37 no.10:37-38 O '62.
(MIRA 15:10)

1. Institut goryuchikh iskopayemykh.

(Briquets(Fuel)) (Binding materials)

DAVYDOV, V.P.; SEMENOV, L.V.; VASIL'YEV, S.F.

Oxidizing pyrolysis of gasolines. Nefteper. i neftekhim. no.10:23-26 '63. (MIRA 17:2)

1. Institut goryuchikh iskopayemykh AN SSSR.

DAVYDOV, V.P.; SEMENOV, L.V.; FRIDMAN, N.I.

Economics of the manufacture of coke briquets from gas, long-flame, and weakly-caking coals. Trudy IGI 20:198-207 '63.
(MIRA 17:8)

SEMENOV, L.V.; KIRSANOVA, O.P.; DAVYDOV, V.P.

Economics of and prospects for the use of peat in the by-product coke industry. Trudy IGI 20:237-242 '63.
(MIRA 17:8)

DAVYDOV, V.P.; SEMENOV, L.V.; KONSTANTINOVA, T.N.

Economic efficiency and prospects of introducing the method of coke charge granulation in industry. Trudy IGI 22:169-177 '63. (MIRA 16:11)

SEMENOV, L.V.; DAVYDOV, V.P.

Ore-fuel granules represent a new efficient material in metallurgy. Trudy IGI 22:131-135 '63. (MIRA 16:11)

SEMENOV, L.V.; DAVYDOV, V.P.; SHISHAKOV, N.V.; CHUKANOVA, O.M.; KIRSANOVA, O.P.

Prospects for and the economic effectiveness of using trapped emulsions and watery petroleum products in the preparation of acetylene. Khim. i tekh. topl. i masel 8 no.7:40-44 Jl '63. (MIRA 16:7)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
(Acetylene) (Petroleum products) (Cracking process)

DAVYDOV, V.P.; SEMENOV, L.V.

Technical and economic indices of the production of high quality solvents. Khim. i tekh. topl. i masel 8 no.12:43-45 D '63. (MIRA 17:1)

1. Institut goryuchikh iskopayemykh AN SSSR.

L 23103-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP4049874 S/0318/64/000/002/0029/0032

AUTHOR: Semenov, I. V.; Davydov, V. P.; Chukanova, O. M.

TITLE: A highly effective method of preparing acetylene by the electro-cracking of petroleum emulsions

SOURCE: Neftepererabotka i neftekhimiya, no. 2, 1964, 29-32

TOPIC TAGS: acetylene manufacture, petroleum electrocracking, electrocracked acetylene, petroleum refining

ABSTRACT: This is a cost study of V. V. Tatarinov's patent No. 40352 (1934) covering electrocracking by microdischarge of various liquid petroleum products such as crude oil, kerosene, gasoline and masut, resulting in a gaseous material containing up to 30% H_2C_2 by volume (vs. 8-15% by pyrolysis). The authors investigated the application of this method to oils containing up to 30% water. By emulsifying such oils with the aid of a Khotuntsev-Pushkin disperser (now domestically manufactured), subjecting the emulsion to electro-cracking by microdischarges, compressing the cracking gases to 10-12 atm., and extracting acetylene with dimethylformamide, the authors obtained the following results: to make 1 metric ton of acetylene from oil containing 30% water, the quantity of raw material

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required is 3055 kg; 3260 nm^3 of synthetic gas is produced. The corresponding figures for raw material with 17% water are: 2392 kg oil emulsion, 2426 nm^3 gas; in both cases, there is 312 kg carbon black. The method is not further described but costs at the Novocherkassk plant are analyzed in detail: 1 ton H_2C_2 costs 155.62 rubles by the pyrolysis process but 151.44 rubles by electrocracking; capital investments in rubles/ton capacity are 86.8 vs. 40.23. Power requirements for making 1 ton acetylene are 10180 kwhrs = 107.91 rubles. There are some discripancies between text and tables, probably due to the utilization of byproducts. Orig. art. has: 2 tables.

ASSOCIATION: Institut goryuchikh iskopayemy*kh (Institute of Fossil Fuels)

SUBMITTED: 00 ENCL: 00 SUB CODE: FP, OC

NO REF SOV: 005 OTHER: 000

Card 2/2

ACC NR: AT6032375 SOURCE CODE: UR/0000/66/000/000/0108/0114

AUTHOR: Davydov, V. P.; Semenov, L. V.; Kuz'min, V. I.

ORG: None

TITLE: The economic efficiency of processing low octane gasolines

SOURCE: AN SSSR. Institut goryuchikh iskopayemykh. Novyye sposoby polucheniya khimicheskikh produktov na osnove goryuchikh iskopayemykh (New methods for the preparation of chemical products based on mineral fuels). Moscow, Izd-vo Nauka, 1966, 108-114

TOPIC TAGS: petroleum engineering, fuel octane rating, pyrolysis, hydrocarbon, gasoline

ABSTRACT: The authors discuss the economic efficiency of processing low octane gasolines at the present time in the Soviet Union. The only method for processing low octane fractions that will be available up to 1970 is pyrolysis in tubular furnaces designed for gaseous and liquid raw hydrocarbons. Studies carried out by several institutes have proved the economic efficiency of pyrolytic processing of low octane gasoline fractions. This is explained by the fact that complex processing of raw hydrocarbons reduces capital investment and operating expenditures by the simultaneous production of an entire series of products as compared to the most progressive methods of producing them individually. Pyrolysis in tubular furnaces is the most

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efficient means for processing liquified gases and their mixtures with dry hydrocarbon gases and gasoline fractions. Two goals in processing low octane gasoline by pyrolysis in tubular fornaces are considered: 1. chemical--producing a series of hydrocarbon and divinyl products for the chemical industry; 2. chemico-fuel (butylene-divinyl)--concentrating on the production of a pyrocondensate used as a high octane automobile fuel component. Projected statistics for 1970 show that 60% of the entire requirement in pyrolytic raw materials will be filled by using low octane gasoline. A table is given showing the economic efficiency of various pyrolytic processes based on one million tons of low octane gasoline. These data show that high temperature pyrolysis in tubular furnaces using the propylene process with subsequent complex pyrolytic resin processing is most efficient. Such a process ensures practically the same output of propylene, isobutylene, divinyl and 2.45 times more ethylene than the butylene-divinyl process. An analysis of the technical and economic indices of complex processing of low octane gasolines also shows the high economic efficiency of extracting valuable chemical products from pyrolytic resin. Orig. art. has: 2 tables.

SUB CODE: 07,21/ SUBM DATE: 29Mar66

Card 2/2

DAVYDOV, V. P.

Role of enteric bacteria and growth reactivity of the organism during toxicoses in young animals. Vopr. pediat. 19 no. 4: 23-28 1951. (CLML 21:3)

1. Candidate Medical Sciences. 2. Of the Department of Pediatrics (Head -- Honored Worker in Science Prof. M. S. Maslov, Active Member of the Academy of Medical Sciences USSR) and of the Department of Microbiology (Head -- Prof. I. Ye. Minkevich), Military Academy imeni S. M. Kirov.

DAVYDOV, V.P., doktor meditsinskikh nauk

Role of Escherichia coli in the origin of gastrointestinal diseases in children of early age. Vop.okh.mat. i det. 1 no.2:17-24 Mr-Ap '56. (MIRA 9:9)

1. Kafedra pediatrii Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova (nauchnyy rukovoditel' - deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki prof. M.S.Maslov) Leningrad.

(ESCHERICHIA COLI) (INTESTINES--DISEASES)
(CHILDREN--DISEASES)

DAVYDOV, V.P., doktor meditsinskikh nauk

"Bacillary dysentery in children". A.L.Libov. Reviewed by V.P. Davydov. Vop.okh.mat. i det. 1 no.2:85-87 Mr-Ap '56. (MLRA 9:9)
(DYSENTERY) (LIBOV, A.L.)

DAVYDOV, V.P., doktor meditsinskikh nauk

"Infectious toxemia in the newborn." I.A.Shtern. Reviewed by V.P.Davydov. Pediatriia 39 no.3:93-94 My-Je '56. (MLRA 9:9)
(INFANTS (NEWBORN)--DISEASES) (SHTERN, I.A.)

DAVYDOV, V.P.

KOLESOV, A.P.; KUTUSHEV, F.Kh.; DAVYDOV, V.P.; YEGOROV, P.I.; ZERNOV, N.P.

Surgical treatment of bronchiectasis in children [with summary in English, p.160). Vest.khir. no.5:86-94 My '57. (MLRA 10:7)

1. Iz khirurgicheskoy kliniki usovershenstvovaniya vrachey (nach. - prof. P.A.Kupriyanov) i kliniki detskikh bolezney (nach. - prof. M.S. Maslov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova. Adres avtorov: Leningrad, 9, pr. K.Marksa, d.7/8, khirurgicheskaya klinika usovershenstvovaniya vrachey.

(BRONCHIECTASIS, in inf. and child surg.)